

A New Species Close to *Juncus benghalensis* from Nepal Himalaya

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A new species of *Juncus* subgenus *Alpini*, *Juncus sherei*, is described from Nepal Himalaya. This is distinguished from resembling species by the number of grooves on stems and leaves and the length of anthers.

Juncus benghalensis Kunth and its allied species are characterized by a single terminal capitulum and stamens exerted from tepals. About 15 species have been recognized and, they except for *J. triglumis* L. ranging widely in the northern hemisphere occur in high elevations more than 3000 m in the region from Himalaya to south west China through Tibet.

We have noticed a new species in our collections. The species named *Juncus sherei* is related to *J. benghalensis*, but differs by the leaves with a single groove each on adaxial and abaxial side, the shorter anthers (1.8–2.5 mm long) and the lack of stolons (Figs. 2-1, 2, 3, 10). The leaves of *Juncus benghalensis* has a single groove on the adaxial side only. *Juncus gonggae* Miyam. & H. Ohba and *J. brachystigma* Sam. differ from *J. sherei* by the multi grooved stems and basal leaves (Figs. 2-4, 5, 6, 7, 8). The presence and absence and the number of grooves on stems and leaves are considered to be constant and stable in *Juncus*.

Juncus sherei was found on mossy rocks in *Rhododendron* forests with *J. benghalensis* or sometimes on exposed grassland slopes.

The epithet is dedicated to Mr. Shere Sherpa who has helped us in the field researches in Nepal.

***Juncus sherei* Miyam. & H. Ohba, sp. nov.**
(Fig. 1)

Juncus benghalensis Kunth primo ad aspectu maxime similis, sed in utrinque paginis adaxiali abaxiali que caulibus et foliis basalibus caulinisque canaliculatis, antheris longioribus (2.8–3.8 mm longis), et sine stolonibus satis diagnoscenda. *Juncus gonggae* Miyam. & H. Ohba et *J. brachystigma* Sam. ab hac specie caulibus foliisque multo canaliculatis bene differt.

Rhizome very short. Stems erect, terete, 6–19 cm long. Leaves grooved on both the adaxial and abaxial sides, auricles round, 0.7–1.0 mm, sheathing at base whitish brown; cauline leaves absent, sometime present, solitary, linear, 1.5–3.0 cm long, shorter than inflorescence; the basal leaves 2–11 cm long; leaf sheath 1–4 cm long. Inflorescence a single capitate with several flowers, white; bract lanceolate, 2–4 mm long, 0.5–2 mm wide, brown; lowest bracts longer than the flower acicular-lanceolate, 0.5–1.5 cm long, 1–2 mm wide, brownish green. Flowers 4–8 mm long, 6–12 mm wide, with pedicels 0.3–0.5 mm long. Perianth lanceolate, 3–6 mm long; 1–1.7 mm wide, white. Stamens 6, longer than the perianth, 5.8–8.8 mm long; filaments 4–6.1 mm long; anthers, linear elliptic, white, 1.8–2.5



Fig. 1. *Juncus sherei* (holotype). 1: Habit of plant. 2: Inflorescence. 3: Outer perianth and stamen. 4: Inner perianth and stamen. 5: Capsule. 6: Cross section of capsule. 7: Leaf auricle. 8: Cross section of stem. 9: Cross section of basal leaf. 10: Cross section of lowest bract. Scales: a (2 cm) for 1; b (5 mm) for 2; c (2.5 mm) for 3, 4, 5 and 7; d (1 mm) for 6; e (0.5 mm) for 8, 9 and 10.

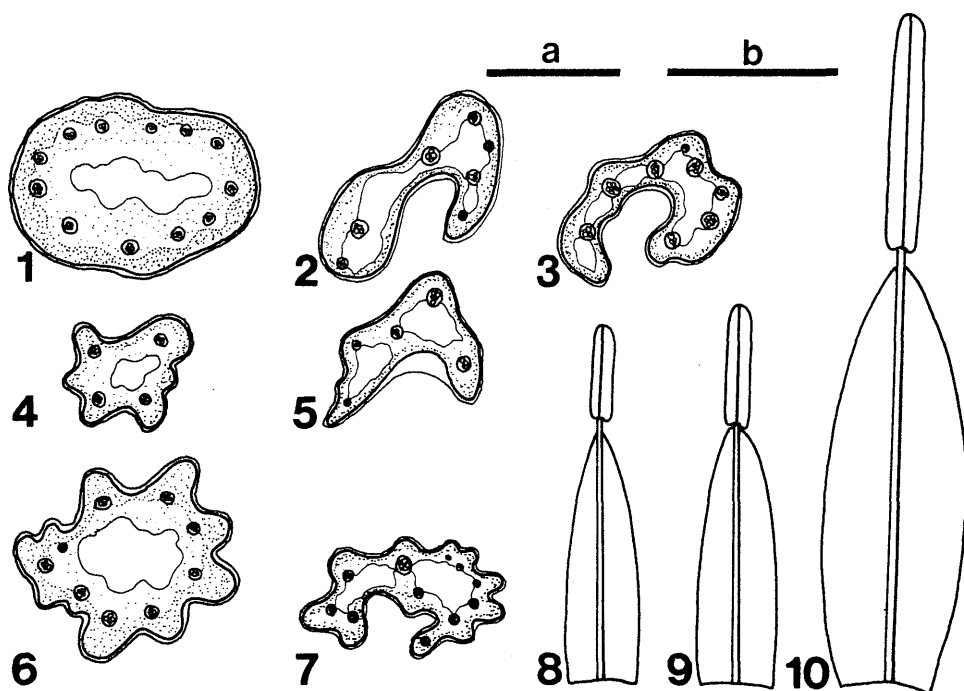


Fig. 2. Illustrations of diagnostic characters of *Juncus benghalensis*, *J. gonggae* and *J. brachystigma*. 1, 2, 3 and 10: *J. benghalensis*, 4, 5, and 9: *J. gonggae*, 6, 7 and 8: *J. brachystigma*. 1, 4 and 6: Cross section of stem. 2, 5 and 7: Cross section of basal leaf. 3: Cross section of cauline leaf. 8, 9 and 10: Outer perianth and stamen. Scales: a (0.5 mm) for 1–7; b (2.5 mm) for 8–10.

mm long, two times as long as filaments. Stigmas 0.6–0.8 mm long. Style 1.3–1.8 mm long. Capsules obovoid-trigonal, 2–3 mm long, 1–1.5 mm wide.

Type: East Nepal, Sagarmatha Zone, Solukhumbu District, Gnaula – Pike, 3300 m, Miyamoto et al. 9580049, 22 Jul. 1995 (TI-holo).

Paratypes: Nepal, Bagmati Zone, Rasuwa District, NW of Dobato, 3400 m, Hass 2162A, 10 Aug. 1974 (BM); *ibid.*, Yure Kharka – Tinbu Kharka, 3700 m, Miyamoto et al. 9410053a, 26 Jul. 1994 (TI); *ibid.* Paldol Base Camp – a kharka, 4300 m, Miyamoto et al. 9410163, 3 Aug. 1994 (TI); Sagarmatha Zone, Solukhumbu District, Beni Kharka – Sarkari Pati, 3970–3350 m, Ohba et al. 8581282, 2

Sept. 1985 (TI); *ibid.*, Najing Ding – Chalem Kharka, 3100 m, Miyamoto et al. 9580140, 31 Jul. 1995 (TI); Thasing Dingma – Saure Kharka, 3700 m, Miyamoto et al. 9580194, 4 Aug. 1995 (TI); Koshi Zone, Sankhuwa Sabha District, Khongma – Sano Pokhari, 3800 m, Minaki et al. 9020641, 5 Aug. 1990 (TI); *ibid.*, Around Cha Ding Kharka, 3900 m, Minaki et al. 9020686b, 7 Aug. 1990 (TI); *ibid.*, 4100 m, Minaki et al. 9020752b, 9 Aug. 1990 (TI). Bhutan: Phajudin Limpere, Cooper 3513, 4 Nov. 1914 (BM).

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宮本 太^a, 大場秀章^b: ネパールヒマラヤで見出された *Juncus benghalensis* Kunth に近縁な 1 新種

東ヒマラヤよりイグサ属の 1 新種 (*Juncus sherei*) を記載した. *Juncus sherei* は *J. benghalensis* Kunth に近縁と考えられるが, *J. benghalensis* は根茎が這うこと, 基部の葉と茎には向軸側に一本の溝があること, 葯が長い (2.8—3.8 mm) ことで異なる. また *J. gonggae* Miyam. & H. Ohba と *J.*

brachystigma Sam. にも似るが^c, これらの種が基部の葉と茎に多数の溝を持つことで異なる. 本種はシャクナゲ林の湿った岩の上に *J. benghalensis* と混生し, 時に草地の斜面にも生育する.

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